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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/759,684	01/10/2001	Larry L. Hood	155694-0067	3084

7590 09/22/2005  
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EXAMINER

SHAY, DAVID M

ART UNIT	PAPER NUMBER
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3739

DATE MAILED: 09/22/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/759,684

Applicant(s)

HOOD

Examiner

david shay

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on August 1, 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 11, 13, 14, 16, 18, 20, 21 and 23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11, 13, 14, 16, 18, 20, 21 and 23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Applicant argues that Doss et al teach away from allowing the electrode to contact the cornea. The support for this being the passages in Doss et al wherein the electrode is described as being near to, but not touching the cornea. Given this teaching, applicant concludes, Doss et al cannot be combined with Schachar. The examiner cannot agree. While it is true that Doss et al discuss keeping the electrode out of contact with the corners, nowhere in the four corners of the Doss et al reference is there a caution not to contact the cornea in the manner contemplated by Schachar. The reason behind Doss avoiding contact with the cornea is to prevent excessive heating of the corneal epithelium, while providing sufficient heat to the stroma to prevent regression (see, for example column 1, lines 17-63). This, however would not prevent one having ordinary skill in the art from employing a device and method as taught by Schachar in combination with those of Doss et al, since the insertable probe of Schachar would not heat the epithelium and would provide sufficient heat to the stroma.

Claims 11, 13, 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doss et al in combination with Schachar and Wuchinich. Doss et al teach a device which can deliver energy at 100 KHz-10MHz (see col. 3, lines 46-51), with a ground pad (see Fig. 1, element 36 and col. 3, lines 41-44), a connector arrangement as claimed (see elements 12, 16, and 20 or 12, 26 and 28 in figure 5) and a stop (see element 42 in figure 5). Doss et al also teach the application of power in bursts of "about one second" (see col. 3, line 50) as well as the typical corneal thickness and desired temperature ranges to heat the tissue (see col. 1, line 38-68). Schachar teaches a system for heating the corneal stroma including probe tip which is

heated to heat the stroma wherein the last 300 to 600 microns is considered to be the tip and the shaft of the probe is considered a "spring beam" since its function is to help maintain contact with the tissue to be heated. Wuchinich teaches the use of a pulsed periodic damped waveform for coagulation. It would have been obvious to the artisan of ordinary skill to employ the power source and connection of Doss et al to maintain the power level at or below 1.2 watts, since the desired temperature changes to produce the effect are known, and thus the appropriate wattage would also be known. Doss et al also teach the desired temperature for shrinkage of tissue and the use of RF in the claimed frequency and time exposure range to provide the shrinkage; to either employ the connections of Doss et al in the system of Schachar, since Schachar teaches no particular power source or to employ the probe configuration of Schachar in the device of Doss et al, since this would provide a more localized application of heat to the stromal tissue and to maintain the power level at or below 1.2 watts, since the desired temperature to produce the effects are known and thus the appropriate wattage would also be known, further the exact power level and duration being dependant on the probe geometry of Schachar being the same as that of applicants probe, the power requirement would be the same, and to employ a damped waveform, since this is the waveform used for coagulation and to employ a pulse repetition rate; the precise repetition rate determining the temperature that the tissue will reach; and the temperature for corneal shrinkage is known, as taught by Doss et al, thus producing a device as claimed.

Claims 20, 21, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doss et al in combination with Schachar and Wuchinich. The teachings of Wuchinich and Doss et al and the motivations for combinations and modification thereof are essentially those already

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set forth above. Thus it would have been obvious to the artisan of ordinary skill to combine these old and well known teachings to produce a method such as claimed.

Applicant's arguments filed August 1, 2005 have been fully considered but they are not persuasive. The arguments are not persuasive for the reasons set forth above.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

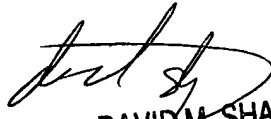
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to david shay whose telephone number is (571) 272-4773. The examiner can normally be reached on Tuesday through Thursday from 6:30 a.m. to 5:00 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eleni Mantis-Mercader, can be reached on Monday, Tuesday, Thursday, and Friday at (571) 272-4740. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



DAVID M. SHAY  
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